

LOGISTICS AUTOMATION AND PROCESS REENGINEERING: IMPACT ON INTER-HOSPITAL LOAN MANAGEMENT

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BACKGROUND AND IMPORTANCE

- Inter-hospital **loans** are part of the usual practice in the Hospital Pharmacy department. Optimization of this process is key to an improved utilization of resources and time by the hospital pharmacist.

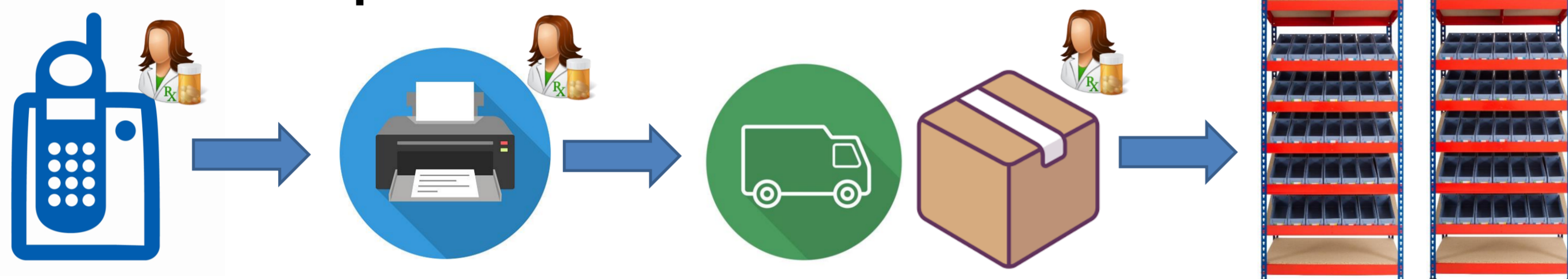
AIM AND OBJECTIVE

- To evaluate the impact on pharmacist time and economic savings after the automation of the drug storage system in the Pharmacy Department and after the redesign of the **inter-hospital loan requesting process (HLRP)**.





MATERIALS AND METHODS

- **Retrospective, observational** study in a tertiary care hospital, in which we analysed the loan registry of a pharmacy department in 2016 (pre-intervention period) and 2019 (post-intervention period).
- Intervention was based on the automation of the pharmacy storage system and redistribution of roles involved in the HLRP.

Pre-intervention period:



Variables that were analysed:

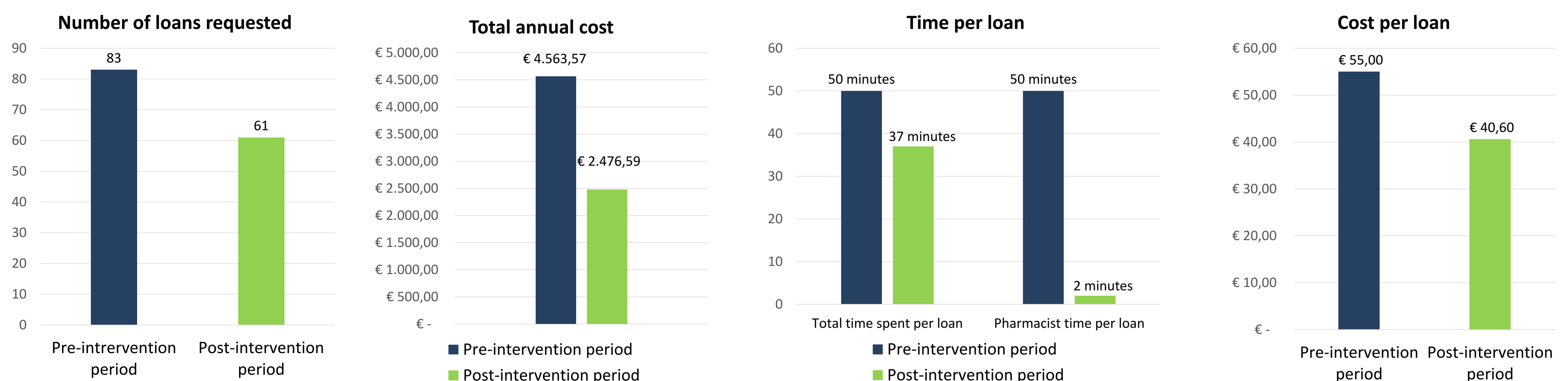
- Time spent by pharmacist.  
- Time spent by administrative assistants and pharmacy technicians.  
- Cost in personnel time.

Post-intervention period:



RESULTS

- The number of loan requests was 83 in 2016 versus 61 in 2019, a reduction of 24.20%.
- There was a reduction of 13 minutes in the total time spent on HLRP (50 minutes in 2016 compared to 37 minutes in 2019).
- The cost derived from the request of each loan was €55 in 2016 vs. €40.60 in 2019, resulting in an annual savings of €2,086.98 (45.73%).
- Time spent by the pharmacist decreased from 50 minutes in 2016 (100% of the activities and time spent) to 2 minutes in 2019 (5.4% of the time), used only in the assessment of the number of pharmaceutical units requested in the loan.



CONCLUSION AND RELEVANCE

- The automation of medication storage systems, together with process reengineering, improves the efficiency of medication loan management, freeing up pharmacist time to perform more value-added tasks.